VPDES PERMIT PROGRAM FACT SHEET

This document gives pertinent information concerning the VPDES Permit listed below. This permit is being processed as a **MINOR MUNICIPAL** permit.

1. **PERMIT NO.**: VA0021253 **EXPIRATION DATE**: April 20, 2011

2. **FACILITY NAME AND LOCAL MAILING ADDRESS**

Onancock WWTP
15 North Street
Onancock, VA 23417

CONTACT AT FACILITY:
NAME: Bryan Horton
TITLE: Operator In Charge
PHONE: (757) 787 4274
EMAIL:

FACILITY LOCATION ADDRESS (IF DIFFERENT)

23656 North Street
Onancock, VA 23417

CONTACT AT LOCATION ADDRESS
NAME: Bryan Horton
TITLE: Operator in Charge
PHONE: (757) 787 4274
EMAIL:

3. **OWNER CONTACT**: (TO RECEIVE PERMIT)
NAME: Sandy Manter
TITLE: Town Manager
COMPANY NAME: Town of Onancock
ADDRESS: 15 North Street
Onancock, VA 23417
PHONE: (757) 787 3363
EMAIL:

CONSULTANT CONTACT:
NAME:
FIRM NAME:
ADDRESS:

PHONE: ( )
EMAIL:

4. **PERMIT DRAFTED BY**: DEQ, Water Permits, Regional Office

Permit Writer(s): Sauer Date(s): 12/1/10
Reviewed By: McConathey Date(s): 12/03/2010

5. **PERMIT ACTION:**

( ) Issuance (X) Reissuance ( ) Revoke & Reissue ( ) Owner Modification
( ) Board Modification ( ) Change of Ownership/Name [Effective Date:]

6. **SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS:**

Attachment 1	Site Inspection Report/Memorandum
Attachment 2	Discharge Location/Topographic Map
Attachment 3	Schematic/Plans & Specs/Site Map/Water Balance
Attachment 4	TABLE I - Discharge/Outfall Description
Attachment 5	TABLE II - Effluent Monitoring/Limitations
Attachment 6	Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding
Attachment 7	Special Conditions Rationale
Attachment 8	Receiving Waters Info./Tier Determination/STORET Data/Stream Modeling/303(d) Listed Segments
Attachment 9	TABLE III(a) and TABLE III(b) - Change Sheets
Attachment 10	EPA Permit Checklist
Attachment 11	Chronology Sheet
Attachment 12	Public Participation

APPLICATION COMPLETE: 9/20/10, upon receipt of VDH review

7. **PERMIT CHARACTERIZATION:** (Check as many as appropriate)

(X) Existing Discharge
( ) Proposed Discharge
( ) Municipal
SIC Code(s) 4952
( ) Industrial
SIC Code(s)
(X) POTW
( ) PVOTW
( ) Private
( ) Federal
( ) State
( ) Publicly-Owned Industrial

(X) Effluent Limited
(X) Water Quality Limited
( ) WET Limit
( ) Interim Limits in Permit
( ) Interim Limits in Other Document
( ) Compliance Schedule Required
( ) Site Specific WQ Criteria
( ) Variance to WQ Standards
( ) Water Effects Ratio
(X) Discharge to 303(d) Listed Segment
( ) Toxics Management Program Required
( ) Toxics Reduction Evaluation
( ) Storm Water Management Plan
( ) Pretreatment Program Required
( ) Possible Interstate Effect
(X) CBP Significant Dischargers List

8. **RECEIVING WATERS CLASSIFICATION:** River basin information.

Outfall No(s): 001

Receiving Stream:	North Branch of Onancock Creek to the Chesapeake Bay
River Mile:	7-ONB 000.42
Basin:	Chesapeake Bay/Atlantic Ocean/Small Coastal
Subbasin:	N/A
Section:	2
Class:	II
Special Standard(s):	a, NEW-20
Tidal:	YES

9. **FACILITY DESCRIPTION:** Describe the type facility from which the discharges originate.

Existing municipal discharge resulting from the discharge of treated domestic sewage from a newly upgraded .75 mgd WWTP.

10. **LICENSED OPERATOR REQUIREMENTS:** ( ) No (X) Yes Class: II

11. **RELIABILITY CLASS:** I

12. **SITE INSPECTION DATE:** **REPORT DATE:**

Performed By: S. Thomas

SEE ATTACHMENT 1

13. **DISCHARGE(S) LOCATION DESCRIPTION:** Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.

Name of Topo: Pungoteague Quadrant No.: 121A **SEE ATTACHMENT 2**

14. **ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.**

Narrative:

SEE ATTACHMENT 3

15. **DISCHARGE DESCRIPTION:** Describe each discharge originating from this facility.

SEE ATTACHMENT 4

16. **COMBINED TOTAL FLOW:**

TOTAL: .75 MGD (for public notice)

DESIGN FLOW: .75 MGD (MUN.)

17. **STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS:**
(Check all which are appropriate)

- X State Water Control Law
- X Clean Water Act
- X VPDES Permit Regulation (9 VAC 25-31-10 et seq.)
- X EPA NPDES Regulation (Federal Register)
- ___ EPA Effluent Guidelines (40 CFR 133 or 400 - 471)
- X Water Quality Standards (9 VAC 25-260-5 et seq.)
- X Wasteload Allocation from a TMDL or River Basin Plan

18. **EFFLUENT LIMITATIONS/MONITORING:** Provide all limitations and monitoring requirements being placed on each outfall.

SEE TABLE II - ATTACHMENT 5

19. **EFFLUENT LIMITATIONS/MONITORING RATIONALE:** Attach any analyses of an outfall by individual toxic parameter. As a minimum, it will include: statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); wasteload allocation (acute, chronic and human health); effluent limitations determination; input data listing. Include all calculations used for each outfall and set of effluent limits and those used in any model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limiting internal waste streams and indicator pollutants. Attach chlorine mass balance calculations, if performed. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:

VARIANCES/ALTERNATE LIMITATIONS: Provide justification or refutation rationale for requested variances or alternatives to required permit conditions/limitations. This includes, but is not limited to: waivers from testing requirements; variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

N/A

SUITABLE DATA: In what, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

All suitable effluent data were reviewed.

ANTIDEGRADATION REVIEW: Provide all appropriate information/calculations for the antidegradation review.

The receiving stream has been classified as tier 1; therefore, no further review is needed. Permit limits have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

ANTIBACKSLIDING REVIEW: Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information.

There are no backsliding issues to address in this permit (i.e., limits as stringent or more stringent when compared to the previous permit).

SEE ATTACHMENT 6

20. **SPECIAL CONDITIONS RATIONALE**: Provide a rationale for each of the permit's special conditions.

SEE ATTACHMENT 7

21. **TOXICS MONITORING/TOXICS REDUCTION AND WET LIMIT SPECIAL CONDITIONS RATIONALE**: Provide the justification for any toxics monitoring program and/or toxics reduction program and WET limit.

NA

22. **SLUDGE DISPOSAL PLAN**: Provide a description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.

Sludge is transported to the Accomack County Landfill under permit number 112 for sanitary waste.

23. **MATERIAL STORED**: List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.

Material stored are only typical chemicals used in the wastewater treatment process.

24. **RECEIVING WATERS INFORMATION**: Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260-5 et seq.). **Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied.** Attach any memoranda or other information which helped to develop permit conditions (i.e. tier determinations, PReP complaints, special water quality studies, STORET data and other biological and/or chemical data, etc.

SEE ATTACHMENT 8

25 **305(b)/303(d) Listed Segments:** Indicate if the facility discharges to a segment that is listed on the current 303(d) list and, if so, provide all appropriate information/calculations.

This facility discharges directly to the North Branch of Onancock Creek. This receiving stream segment has been listed in Category 5 of the 305(b)/303(d) list for non-attainment of enterococcus, dissolved oxygen, PCB in fish tissue and aquatic life (plants). EPA approved the enterococcus TMDL on 8/2/06 for this segment. It contains a wasteload allocation for this discharge of 9.8 X 10(+8) that was based on the original plant flow of .25 MGD. The previous permit issued in April 2006 included tiered limits based on the original plant flow and a plant expansion to .75 MGD. The previous permit and this reissued permit contain a limit of 35 n/cml for enterococci which meets water quality criteria and thus the discharge is not detrimental to stream water quality. The wasteload allocation in the TMDL will be revised to account for the expansion of the plant to .75 MGD. The proposed wasteload allocation at .75 MGD is 2.95 X 10(+9).

The Draft Chesapeake Bay TMDL from Table 4.1.1 on page 33 and Table 9-4 from page 9-41 set WLA and permit limits for VA0021253 for nutrients as follows:

TN effluent concentrations = 4.0 mg/L
TP effluent concentrations = 0.3 mg/L

TN WLA = 9,137 lbs/yr
TP WLA = 685 lbs / yr
TSed WLA = 68,525 lbs/yr

The permit contains limits which conform to the TMDL for nutrients.

For dissolved oxygen, a TMDL has not been prepared or approved for this stream segment. The permit has water quality-based limits for dissolved oxygen which have been achieved and require compliance with the standard prior to discharge. Given these limits, this facility can neither cause nor contribute to the observed violation of the standards. For all other parameters, a TMDL has not been prepared or approved for this stream segment. The permit contains a TMDL reopener clause which will allow the it to be modified, in compliance with Section 303(d)(4) of the Act once a TMDL is approved.

SEE ATTACHMENT 8

27. **NPDES INDUSTRIAL PERMIT RATING WORKSHEET:**

N/A - This is a municipal facility.

28. **DEQ PLANNING COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from DEQ planning.

The discharge is in conformance with the existing planning documents for the area.

29. **PUBLIC PARTICIPATION:** Document comments/responses received during the public participation process. If comments/responses provided, especially if they result in changes to the permit, place in the attachment.

VDH/DSS COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the Virginia Dept. of Health and the Div. of Shellfish Sanitation and noted how resolved.

The VDH reviewed the application and waived their right to comment and/or object on the adequacy of the draft permit.

The DSS has no comments on the application/draft permit.

EPA COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA waived the right to comment and/or object to the adequacy of the draft permit.

ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from an adjacent state and noted how resolved.

Not Applicable.

OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved.

Not Applicable.

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT: Document any comments received from other sources and note how resolved.

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation, and no comments were received.

OR

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation. Section 9 VAC 35-31-310 of the VPDES Permit Regulation states, in part, "The Board shall hold a public hearing whenever it finds, on the basis of requests, a significant degree of public interest in a draft permit(s)."

DESCRIBE PN COMMENTS AND RESOLUTIONS. PROVIDE PUBLIC HEARING DATE AND REFERENCE BACKGROUND MEMORANDUM, IF APPROPRIATE.

PUBLIC NOTICE INFORMATION: Comment Period: Start Date
End Date

Persons may comment in writing or by e-mail to the DEQ on the proposed issuance/reissuance/modification of the permit within 30 days from the date of the first notice. Address all comments to the contact person listed below. Written or e-mail comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The Director of the DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requestor's interests would be directly and adversely affected by the proposed permit action.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting at: Department of Environmental Quality (DEQ), Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, VA 23462. Telephone: 757-518- E-mail: @deq.virginia.gov

Following the comment period, the Board will make a determination regarding the proposed issuance/reissuance/modification. This determination will become effective, unless the Director grants a public hearing. Due notice of any public hearing will be given.

30. **ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:**

The facility was upgraded and expanded during the previous permit term. As of the issuance date of the newly reissued permit, the expansion to a .75 MGD plant will be completed. Nutrient removal technology has been installed, and most every other process equipment at the plant has been upgraded.

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM

Virginia Department of Environmental Quality

WASTEWATER FACILITY INSPECTION REPORT

FACILITY NAME: Onancock WWTP 15 North Street, Onancock, VA 23417	**INSPECTION DATE:** 1/27/2010		
	INSPECTOR Stephen J. Thomas		
PERMIT No.: VA0021253	**REPORT DATE:** 1/29 & 30/2010		
TYPE OF FACILITY: ☑ Municipal ☑ Small Minor ☐ Industrial ☐ Federal	**TIME OF INSPECTION:**	Arrival 1315 PM - 29th 0820 AM - 30th	Departure 1525 PM 1155 AM
	TOTAL TIME SPENT (including prep & travel)	7 Hours	
PHOTOGRAPHS: ☑ Yes ☐ No	**UNANNOUNCED INSPECTION?** ☐ Yes ☑ No		
REVIEWED BY / Date: Kenneth T. Raum			
PRESENT DURING INSPECTION: Bryan Horton			

TECHNICAL INSPECTION

1. Has there been any new construction? • If so, were plans and specifications approved? Comments:	☑ Yes ☐ No
2. Is the Operations and Maintenance Manual approved and up-to-date? Comments:	☑ Yes ☐ No
3. Are the Permit and/or Operation and Maintenance Manual specified licensed operator being met? Comments:	☑ Yes ☐ No
4. Are the Permit and/or Operation and Maintenance Manual specified operator staffing requirements being met? Comments:	☑ Yes ☐ No
5. Is there an established and adequate program for training personnel? Comments:	☑ Yes ☐ No
6. Are preventive maintenance task schedules being met? Comments:	☑ Yes ☐ No
7. Does the plant experience any organic or hydraulic overloading? Comments:	☑ Yes ☐ No
8. Has there been any bypassing or overflows since the last inspection? Comments: Sewage overflow from manhole on 12/9/09 due to heavy rainfall causing I/I problems.	☑ Yes ☐ No
9. Is the standby generator (including power transfer switch) operational and exercised regularly? Comments:	☑ Yes ☐ No
10. Is the plant alarm system operational and tested regularly? Comments:	☑ Yes ☐ No

Permit # VA0021253

TECHNICAL INSPECTION

11. Is sludge disposed of in accordance with the approved sludge management plan? Comments:	☑ Yes ☐ No
12. Is septage received? • If so, is septage loading controlled, and are appropriate records maintained? Comments:	☐ Yes ☑ No
13. Are all plant records (operational logs, equipment maintenance, industrial waste contributors, sampling and testing) available for review and are records adequate? Comments:	☑ Yes ☐ No

14. Which of the following records does the plant maintain?

☑ Operational logs ☑ Instrument maintenance & calibration

☑ Mechanical equipment maintenance ☑ Industrial Waste Contribution (Municipal facilities)

Comments:

15. What does the operational log contain?

☑ Visual observations ☑ Flow Measurement ☑ Laboratory results ☑ Process adjustments

☐ Control calculations ☐ Other (specify)

Comments:

16. What do the mechanical equipment records contain?

☑ As built plans and specs ☑ Manufacturers instructions ☑ Lubrication schedules

☑ Spare parts inventory ☐ Equipment/parts suppliers

☐ Other (specify)

Comments:

17. What do the industrial waste contribution records contain (Municipal only)?

☑ Waste characteristics ☐ Impact on plant ☑ Locations and discharge types

☐ Other (specify)

Comments:

18. Which of the following records are kept at the plant and available to personnel?

☑ Equipment maintenance records ☑ Operational log ☐ Industrial contributor records

☑ Instrumentation records ☑ Sampling and testing records

Comments:

19. List records not normally available to plant personnel and their location:

Comments: N/A

20. Are the records maintained for the required time period (three or five years)? Comments:	☑ Yes ☐ No

VA DEQ Tech/Lab Inspection Report

Permit # VA0021253

UNIT PROCESS EVALUATION SUMMARY SHEET

UNIT PROCESS	APPLICABLE	PROBLEMS*	COMMENTS
Sewage Pumping	✓		*Alarms operational*
Flow Measurement (Influent)			
Screening/Comminution	✓		
Grit Removal	✓		
Oil/Water Separator			
Flow Equalization			
Ponds/Lagoons	✓		*Emergency holding pond is empty.*
Imhoff Tank			
Primary Sedimentation			
Trickling Filter			
Septic Tank and Sand Filter			
Rotating Biological Contactor			
Activated Sludge Aeration	✓		
Biological Nutrient Removal			
Sequencing Batch Reactor			
Secondary Sedimentation	✓	1	*Small grease balls noticed on inside baffles of both units. They should be removed. Weirs should be cleaned.*
Flocculation			
Tertiary Sedimentation			
Filtration			
Micro-Screening			
Activated Carbon Adsorption			
Chlorination			
Dechlorination			
Ozonation			
Ultraviolet Disinfection	✓		*New UV unit is now functional*
Post Aeration	✓		
Flow Measurement (Effluent)	✓		
Land Application (Effluent)			
Plant Outfall	✓		
Sludge Pumping			
Flotation Thickening (DAF)			
Gravity Thickening			
Aerobic Digestion	✓		
Anaerobic Digestion			
Lime Stabilization			
Centrifugation			
Sludge Press	✓	1	*Unit is down for minor repair. Repairs expected to be completed by 2/5/1010*
Vacuum Filtration			
Drying Beds	✓		*2 currently in use.*
Thermal Treatment			
Incineration			
Composting			
Land Application (Sludge)			

* Problem Codes

1. Unit Needs Attention
2. Abnormal Influent/Effluent
3. Evidence of Equipment Failure
4. Unapproved Modification or Temporary Repair
5. Evidence of Process Upset
6. Other (explain in comments)

VA DEQ Tech/Lab Inspection Report

Permit # VA0021253

EFFLUENT FIELD DATA: - Note field analysis performed during lab inspection on 1/28/10

Flow	.325 MGD	**Dissolved Oxygen**	8.1 mg/L	**TRC (Contact Tank)**	N/A mg/L
pH	6.6 S.U.	**Temperature**	11.6 °C	**TRC (Final Effluent)**	N/A mg/L

Was a Sampling Inspection conducted? ☐ Yes (see Sampling Inspection Report) ☑ No

CONDITION OF OUTFALL AND EFFLUENT CHARACTERISTICS:

1. Type of outfall: ☑ Shore based ☐ Submerged Diffuser? ☐ Yes ☑ No

2. Are the outfall and supporting structures in good condition? ☑ Yes ☐ No

3. Final Effluent (evidence of following problems): ☐ Sludge bar ☐ Grease
   ☐ Turbid effluent ☐ Visible foam ☐ Unusual color ☐ Oil sheen

4. Is there a visible effluent plume in the receiving stream? ☐ Yes ☑ No

5. Receiving stream: ☑ No observed problems ☐ Indication of problems (explain below)
   Comments:

INSPECTION OVERVIEW AND CONDITION OF TREATMENT UNITS

The Onancock WWTP expansion and plant upgrade are fully underway at this time. Completion of the upgrade is expected to take place in June of this year. The inspection found the Onancock wastewater treatment facility to be functioning normally despite the ongoing construction. Currently all influent wastewater is pumped directly into the aeration tanks and it then flows into the sedimentation basins. The effluent then flows into the new UV disinfection unit, step aeration, and new outfall. The plant is experiencing increases in influent flow in the last three months due to the unusually wet weather. Infiltration and inflow are the cause the increased flow rates. Polymer is being used extensively to aid with solids settleability in the sedimentation basins.

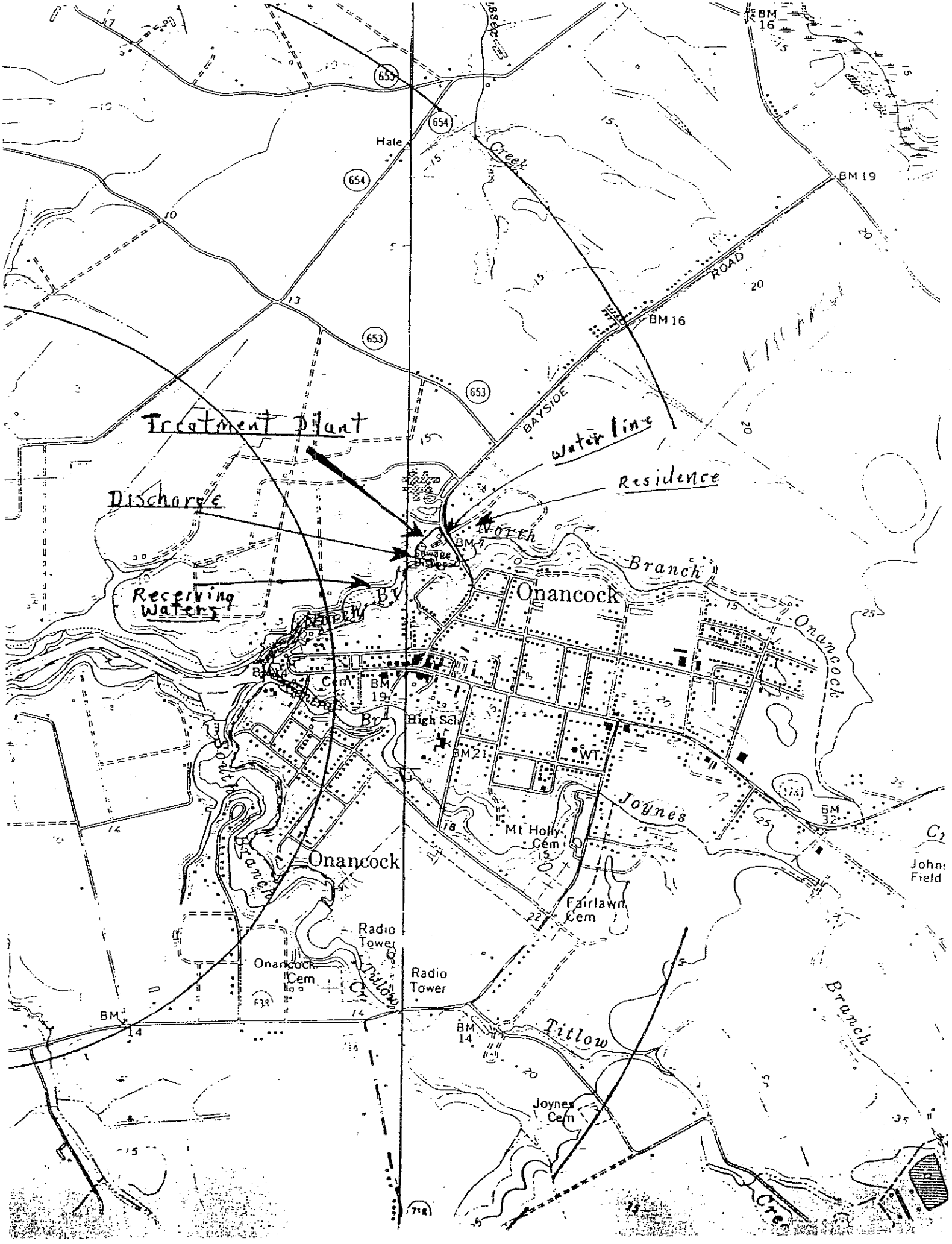
I would like to thank Bryan Horton for his cooperation during the inspection.

REQUIRED CORRECTIVE ACTIONS:

1. There are no required actions at this time, but please pay attention to the comments listed on the sedimentation basin check sheet.

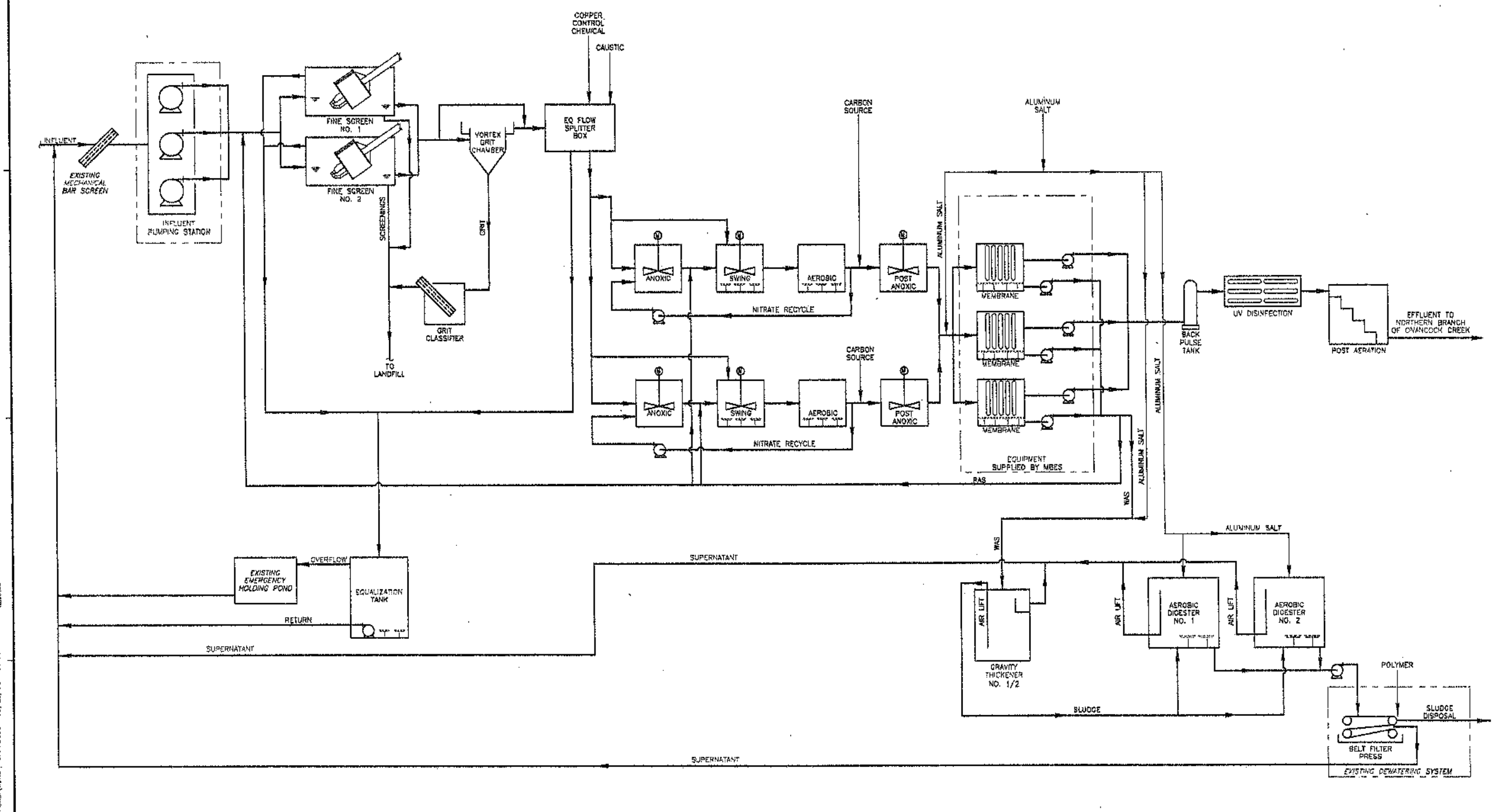
ATTACHMENT 2

DISCHARGE LOCATION/TOPOGRAPHIC MAP


Treatment Plant
Discharge
Receiving Waters
Water line
Residence
BAYSIDE
ROAD
Hale
Creek
North Branch
Onancock
Onancock
Onancock Cem
Mt Holly Cem
Fairlawn Cem
Joynes Cem
High Sch
Radio Tower
Radio Tower
Titlow Cr
Titlow Branch
Joynes
BM 16
BM 19
BM 14
BM 21
BM 32
WT
653
654

ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/ WATER BALANCE



REV. NO.	DATE	DRWN	CHKD	REMARKS
	8/05	CSN	KRS	CONFORMED DRAWING

DESIGNED BY: A. SEN
DRAWN BY: J. ROBINSON
SHEET CHK'D BY: K. SCHENKLBERG
CROSS CHK'D BY: A. SEN
APPROVED BY:
DATE: DECEMBER 2007

CDM
Camp Dresser & McKee
825 Diligence Drive, Suite 205
Newport News, VA 23606
Tel: (757) 873-8850
consulting • engineering • construction • operations

TOWN OF ONANCOCK, VIRGINIA

EXPANSION AND UPGRADES TO THE WASTEWATER TREATMENT FACILITY

LIQUID & SOLIDS FLOW DIAGRAM

PROJECT NO. 31149-55447
FILE NAME: GPRFD005
SHEET NO.
G-5

ATTACHMENT 4

TABLE I - DISCHARGE/OUTFALL DESCRIPTION

TABLE I

NUMBER AND DESCRIPTION OF OUTFALLS

OUTFALL NO.	DISCHARGE LOCATION	DISCHARGE SOURCE (1)	TREATMENT (2)	FLOW (3)
001	37-42-58N 075-44-57W	Domestic waste from the Town of Onancock and a small industrial park	Grit removal, screening, influent pumping, secondary treatment (extended aeration and secondary clarification aided with polymers), flow equalization, supplemental clarification, MBR advanced treatment, UV light disinfection, cascade type post-aeration	0.75 MGD

(1) List operations contributing to flow
(2) Give brief description, unit by unit
(3) Give maximum 30-day average flow for industry and design flow for municipal

ATTACHMENT 5

TABLE II - EFFLUENT MONITORING/LIMITATIONS

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 001 DESIGN FLOW: .75 MGD
Outfall Description: Municipal wastewater treatment plant discharge
SIC CODE: 4952

(X) Final Limits ( ) Interim Limits Effective Dates - From: Effective date To: Expiration

PARAMETER & UNITS	BASIS FOR LIMITS	DESIGN FLOW MULTIPLIER	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
			MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD)			NL	NA	NA	NL	Continuous	TI & RE*
pH (S.U.)			NA	NA	6.0	9.0	1/Day	Grab
CBOD5 (mg/l) [b]			10	15	NA	NA	3D/Week	8-Hr Comp
CBOD5 (kg/d)		.75	28	42	NA	NA	3D/Week	8-Hr Comp
TSS (mg/l) [b]			10	15	NA	NA	3D/Week	8-Hr Comp
TSS (kg/d)		.75	28	42	NA	NA	3D/Week	8-Hr Comp
TRC (mg/l) [a] [b]			0.13	0.16	NA	NA	1/Day	Grab
D.O. (mg/l)			NA	NA	6.5	NA	1/Day	Grab
Enterococci (n/cml) [a]			35	NA	NA	NA	3D/Week (Between 10 am & 4 pm)	

PARAMETER & UNITS	BASIS FOR LIMITS	DESIGN FLOW MULTIPLIER	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
			MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Fecal Coliform (N/CML) [a]			200	NA	NA	NA	3D/Week (Between 10 am & 4 pm)	Grab
Ammonia-Nitrogen (NH_3-N) (mg/l) [b] [c]			0.90	0.90	NA	NA	1/Month	8-Hr Comp
Ammonia-Nitrogen (NH_3-N) (mg/l) [b] [d]			2.0	2.0	NA	NA	1/Month	8-Hr Comp
Total Recoverable Copper (ug/l) [b]			12	12	NA	NA	1/Month	8-Hr Comp
Tot. Nitrogen Annual Average (mg/l) [e] [f]			4.0	NA	NA	NA	1/year	Calculated
Total Nitrogen (mg/l) [b]	1		NL	NA	NA	NA	1/Month	8-Hr. comp
Total Nitrogen - Year to Date (mg/l) [e]	1		NL	NA	NA	NA	1/Month	Calc
Tot. Phosphorus Annual Average (mg/l) [e] [f]			0.3	NA	NA	NA	1/Year	Calculated
Total Phosphorus (mg/l) [b]	1		NL	NA	NA	NA	1/Month	8-Hr. comp
Total Phosphorus - Year to Date (mg/l) [e]	1		NL	NA	NA	NA	1/Month	Calc

*Totalizing, Indicating & Recording Equipment

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.B for additional chlorine/enterococci/fecal coliform monitoring instructions.

[b] See Parts I.C.6. and I.C.7. for quantification levels and reporting requirements, respectively.

[c] Applies for the discharge period of April 1 through October 31 of each year.
[d] Applies for the discharge period of November 1 through March 31 of each year.
[e] See Part I.C.8. for additional instructions regarding total nitrogen and total phosphorus.
[f] Annual average limitation, based on a calculation of all samples collected during the calendar year.

In addition to any Total Nitrogen or Total Phosphorus concentration limits listed above, this facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN05002, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.

2. The design flow of this treatment facility is 0.75 MGD.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. At least 85% removal for BOD and TSS must be attained by this effluent.

The basis for the limitations codes are:
1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

ATTACHMENT 6

EFFLUENT LIMITATIONS/MONITORING RATIONALE/SUITABLE DATA/ ANTIDEGRADATION/ANTIBACKSLIDING

EFFLUENT LIMITATIONS MONITORING/RATIONALE
Onancock WWTP SIC 4592

OUTFALL 001

0.75 MGD Facility

Flow - Continuous monitoring, based on Best Professional Judgment: This facility will have a design flow of 0.75 MGD.

pH - Limits of 6.0 su min, 9.0 su max, monitoring is 1/day by grab sample: These limits are based on best professional judgment (BPJ) to protect water quality in the North Branch of Onancock Creek. This is the same limit as listed in the previous permit and will not be changed during this reissuance.

TSS/$CBOD_5$ - Limits of 10 mg/l monthly average - 15 mg/l weekly average, monitoring is three days/week by an 8-hour composite sample. These tertiary limits are based on BPJ and are designed to protect the quality of the North Branch of Onancock Creek. Additionally, this facility is limited to a loading of 28 kg/d monthly average and 42 kg/d weekly average, based on a flow of 0.75 MGD. These parameters have loading limits listed in metric units (kg/d) in accord with DEQ permit preparation guidance.

TRC - Limits of 0.13 mg/l monthly average and 0.16 mg/l weekly average, based on Water Quality Standards. This facility uses UV for disinfection of effluent. Chlorine is maintained at the facility as an emergency backup to the UV. The chlorine limits and monitoring frequency of 1/day by grab sample is required during the times chlorine is used as a backup disinfectant. Chlorine limitations were calculated as a toxic parameter in accordance with OWPS guidance dated September 24, 2000 and VPDES manual dated April, 2001 and updated December 2001.

D.O. - Limits of minimum dissolved oxygen of 6.5 mg/l, monitoring is 1/day by grab sample. This limit is based on BPJ to be protective of water quality. The limit is the same as the previous permit and will not be changed during this reissuance.

Fecal Coliform - Limit of 200 n/cml, 3D/week by grab sample. This limit is based on Water Quality Standards and has been assigned in accordance with 9 VAC 25-260-170 for a discharge to shellfish waters.

Enterococci - Limit of 35 n/cml, 3D/week by grab sample. This limit has been assigned to this permit in accordance with Guidance Memo No. 03-2007. No demonstration will be required since there is no surrogate available with a UV disinfection system.

Ammonia-N - Limits of 0.90 mg/l monthly average/weekly average (summer) and 2.0 mg/l monthly average/weekly average; monitoring is 1/month by 8-hour composite sample. Tiered summer and winter ammonia were calculated during a previous permit reissuance. These limits are based on water quality standards, and are protective of water quality and will not be changed during this reissuance.

Total Recoverable Copper - Limits of 12 ug/l monthly average/weekly average, monitoring is 1/month by 8-hour composite sample. This limit is based on water quality standards and was derived during the last permit cycle following water quality monitoring by the permittee and subsequent calculations. It is protective of water quality and will not be changed during this reissuance.

Total Nitrogen - Annual Average Concentration Limit: An annual average concentration limit of 4.0 mg/l for total nitrogen is required upon expansion to the .75 MGD plant. An upgrade to the treatment system will be installed at the same time as the expansion. The annual average limit is based on the technology-based nutrient limit regulation 9 VAC 25-40-70. The regulation specifies a technology-based limit for total nitrogen and total phosphorus. Further discussion and evaluation of the appropriate nitrogen limit by DEQ staff determined that the proper nitrogen limit is 4.0 mg/l. Additional information concerning this determination is included in this section.

Total Phosphorus - Annual Average Concentration Limit: An annual average concentration limit of 0.3 mg/l for total phosphorus is required upon expansion to the .75 MGD plant. An upgrade to the treatment system will be installed at the same time as the expansion. The annual average limit is based on the technology-based nutrient limit regulation 9 VAC 25-40-70. The regulation specifies a technology-based limit for total nitrogen and total phosphorus.

Total Nitrogen, Total Phosphorus - No limit, monitoring only, at a frequency of 1/month, and units of mg/l. This will allow calculation of the year-to-date concentration and final concentration to determine compliance with the annual average limits.

CALCULATIONS

Loading (kg/d) (Rounded to Significant Figures) = concentration (mg/l) X flow (MGD) X 3.785

CBOD/TSS loading (monthly average) = 10 (mg/l) X 0.75 (MGD) X 3.785 = ***28.38 kg/d = 28 kg/d*** (expressed in 2 significant figures)

CBOD/TSS loading (weekly average) = 15 (mg/l) X 0.75 (MGD) X 3.785 = ***42.58 kg/d = 42 kg/d*** (expressed in 2 significant figures)

ATTACHMENT 7

SPECIAL CONDITIONS RATIONALE

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE

Name of Condition:

B. Additional Total Residual Chlorine (TRC)/enterococci/fecal coliform Limitations and Monitoring Requirements

Rationale: Required by Water Quality Standards, 9VAC 25-260-170, Fecal coliform bacteria; other waters. Also, 40 CFR 122.41(e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment in order to comply with the permit. This ensures proper operation of chlorination equipment to maintain adequate disinfection.

C. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1a. Sludge Reopener

Rationale: Required by the VPDES Permit Regulation, 9 VAC 25-31-220 C., and 40 CFR 122.44 (c)(4), which note that all permits for domestic sewage treatment plants (including sludge-only facilities) include any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act.

1.b. Water Quality Standards Reopener

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-220 D requires effluent limitations to be established which will contribute to the attainment or maintenance of water quality criteria.

1.c. Nutrient Enriched Waters Reopener

Rationale: Significant portions of the Chesapeake Bay and its tributaries are listed as impaired on Virginia's 303(d) list of impaired waters for not meeting the aquatic life use support goal, and the draft 2004 Virginia Water Quality Assessment 305(b)/303(d) Integrated Report indicates that 83% of the mainstem Bay does not fully support this use support goal under Virginia's water quality assessment guidelines. Nutrient enrichment is cited as one of the primary causes for impairment.

Guidance Memorandum 04-2017 implements DEQ's best professional judgment decision to limit increases in nutrient loading from facilities listed on the Chesapeake Bay Program Significant Discharger List. Guidance Memorandum 04-2017 provides the basis for this decision and specifies the procedure for determining annual effluent limitations for these parameters for each affected facility, as well as monitoring requirements and a special condition to be included in each affected permit. Additionally, Guidance Memorandum 04-2017 includes a special condition for submittal of a Basis of Design Report to construct and operate a range of nutrient removal technologies, including but not limited to the limit of technology, as well as a special condition requiring consideration of alternatives and submittal of a plan to optimize nutrient removal with the existing facility. In accordance with the guidance memorandum, this permit contains a special condition requiring submittal of these reports.

1.d. Total Maximum Daily Load (TMDL) Reopener

Rationale: For specified waters, Section 303(d) of the Clean Water Act requires the development of total maximum daily loads necessary to achieve the applicable water quality standards. The TMDL must take into account seasonal variations and a margin of safety. In addition, Section 62.1-44.19:7 of the State Water Control Law requires the development and

implementation of plans to address impaired waters, including TMDLs. This condition allows for the permit to be either modified or, alternatively, revoked and reissued to incorporate the requirements of a TMDL once it is developed. In addition, the reopener recognizes that, in according to Section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan or other wasteload allocation prepared under Section 303 of the Act.

2. Licensed Operator Requirement

Rationale: The Permit Regulation, 9 VAC 25-31-200 D and Code of Virginia 54.1-2300 et. seq., Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.) requires licensure of operators.

3. Reliability Class

Rationale: Required by Sewage Collection and Treatment Regulations, 12 VAC 5-581-20 and 120 for all municipal facilities.

4. CTC, CTO and O & M Manual Requirements

Rationale: Required by the State Water Control Law, Section 62.1-44.19; the Sewage Collection and Treatment Regulations (12 VAC 5-581 et seq); Section 401 of the Clean Water Act; 40 CFR 122.41(e); and the VPDES Permit Regulation (9 VAC-25-31-190E).

5. 95% Design Capacity Notification

Rationale: Required by the VPDES Permit Regulation, 9 VAC 25-31-200 B.2. for all POTW and PVOTW permits. Best professional judgement is used to apply this condition to other (private) municipal treatment facilities.

6. Quantification Levels Under Part I.A.

Rationale: States are authorized to establish monitoring methods and procedures to compile and analyze data on water quality, as per 40 CFR part 130, Water Quality Planning and Management, subpart 130.4. Section b. of the special condition defines QL and is included per BPJ to clarify the difference between QL and MDL.

7. Compliance Reporting Under Part I.A.

Rationale: Defines reporting requirements for toxic parameters and some conventional parameters with quantification levels to ensure consistent, accurate reporting on submitted reports.

8. Nutrient Reporting Calculations

Rationale: §62.1-44.19:13 of the Code of Virginia defines how annual nutrient loads are to be calculated; this is carried forward in 9 VAC 25-820-70. As annual concentrations (as opposed to loads) are limited in the individual permit, this special condition is intended to reconcile the reporting calculations between the permit programs, as the permittee is collecting a single set of samples for the purpose of ascertaining compliance with two permits.

9. Suspension of concentration limits for E3/E4 facilities

Rationale: 9 VAC 25-40-70 B authorizes DEQ to approve an alternate compliance method to the technology-based effluent concentration limitations as required by subsection A of this section. Such alternate compliance method shall be incorporated into the permit of an Exemplary Environmental

Enterprise (E3) facility or an Extraordinary Environmental Enterprise (E4) facility to allow the suspension of applicable technology-based effluent concentration limitations during the period the E3 or E4 facility has a fully implemented environmental management system that includes operation of installed nutrient removal technologies at the treatment efficiency levels for which they were designed.

10. Indirect Dischargers

Rationale: Required by VPDES Permit Regulation, 9 VAC 25-31-200 B.1. for POTWs and PVOTWs that receive waste from someone other than the owner of the treatment works.

11. Sludge Management Plan

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-420, and 40 CFR 503.1 specify the purpose and applicability for sludge management plans. The VPDES Permit Regulation, 9 VAC 25-31-100 J.4., also sets forth certain detailed information which must be included in a sludge management plan. The VPDES sewage sludge permit application form and its attachments constitute the sludge management plan and will be considered for approval with the VPDES permit. In addition, the Biosolids Use Regulation, 12 VAC 5-585-330 and 340, specifies the general purpose and control requirements for an O&M manual in order to facilitate proper O&M of the facilities to meet the requirements of the regulation.

D. PRETREATMENT

Rationale: The permit regulation, 9 VAC 25-31-10 et seq., Part VII, establishes the legal requirements for State, local government and industry to implement National Pretreatment Standards. The Pretreatment Standards are implemented to prevent POTW plant pass through, interference, violation of water quality standards or contamination of sewage sludge. The regulation requires POTWs with a total design flow greater than 5 MGD with significant or categorical industrial input to establish a Pretreatment Program. The regulation also may apply to POTWs with design flows less than 5 MGD if circumstances warrant control of industrial discharges.

ATTACHMENT 8

RECEIVING WATERS INFO./ TIER DETERMINATION/STORET DATA/ STREAM MODELING/303(d) LISTED SEGMENTS

M E M O R A N D U M

Department of Environmental Quality
Tidewater Regional Office

5636 Southern Boulevard — Virginia Beach, VA 23462

SUBJECT: VPDES Application Requests
TO: ~~Stephen Cioccia, TRO~~ Kristie Britt, TRO KMB
FROM: Mark Sauer, TRO
DATE: 12/1/10
COPIES: TRO File - facility #37, PPP

An application has been received for the following facility:

VPDES #: VA0071753 Facility Name: Onancock WWTP

Topo Map Name: Pungoteague

Receiving Stream: North Branch Onancock Creek
[Must be provided for each outfall included in this request or request will be returned]

Attached is a Topographic Map showing facility property boundaries and outfall location(s) for those included in this request. **[MUST be provided or request will be returned]**

Attached is a stream data Request Form **(if data is requested).**

We request the following information from you:

1. __X__ Tier Determination. Tier: 1 (Receiving stream impaired for DO)
Please include a basis for the tier determination. Attachment 1

2. _____ Stream Data Requested for outfall(s) _____
["STREAM DATA RETRIEVAL REQUEST FORM" MUST be completed & included]

3. __X__ Is this facility mentioned in a Management Plan?

_____ No ___✓___ Yes _____ No, but will be included when the Plan is updated.

4. __X__ Are limits contained in a Management Plan? Attachment 2

_____ No ___✓___ Yes **(If Yes, Please include the basis for the limits.)**

5. __X__ Indicate outfall(s) which discharge directly to an impaired (Category 5) stream segment? YES Attachment 1

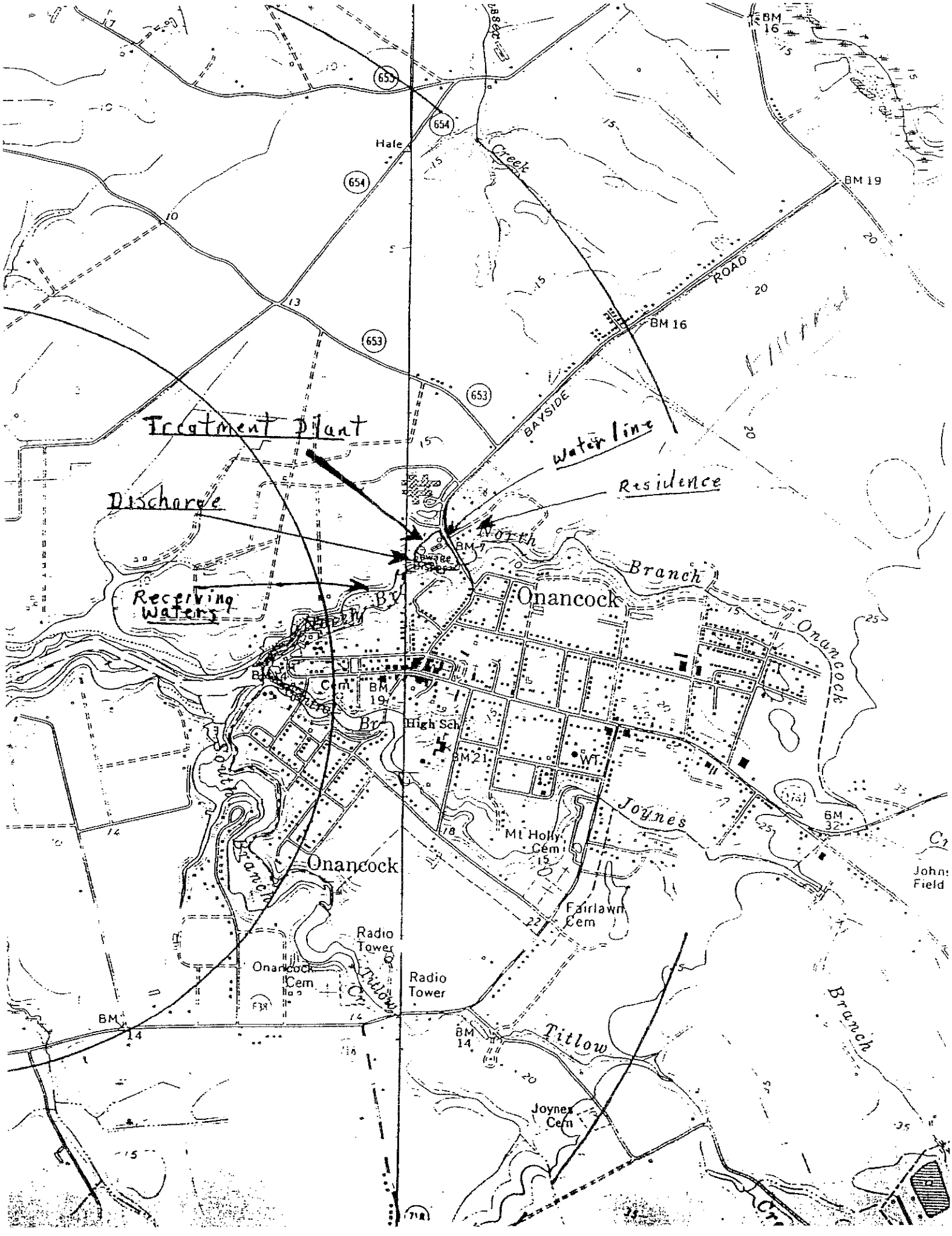
6. __X__ Are outfall(s) WLAs contained in an approved TMDL?

_____ No ___✓___ Yes **(If Yes, Please include the WLAs)**

There was a TMDL pending for this Area - Don't Know the Status... Attachment 3

Return Date Requested: 12/14/10

Date Returned: 12/8/10


Treatment Plant
Discharge
Receiving Waters
Water line
Residence
BAYSIDE
ROAD
Hale
Creek
North
Branch
Onancock
Onancock
Onancock
Cem
High Sch
Mt Holly Cem
Fairlawn Cem
Radio Tower
Radio Tower
Onancock Cem
Joynes Cem
Joynes
Titlow
Titlow
Branch
Johns Field
BM 16
BM 19
BM 16
BM 19
BM 21
BM 32
BM 14
BM 14
653
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2008 Impaired Waters - 303(d) List

Category 5 - Waters needing Total Maximum Daily Load Study

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)	Initial List Date	TMDL Dev. Date
C01E-01-SF2	Great Wicomico River						
Shellfishing	Fecal Coliform	5B	0.637			2004	2016
C01E-02-SF2	Balls Creek						
Shellfishing	Fecal Coliform	5B	0.128			2002	2014
C01E-03-SF2	Tipers Creek						
Shellfishing	Fecal Coliform	5B	0.054			2002	2014
C01E-04-SF	Barrett Creek						
Shellfishing	Fecal Coliform	5B	0.109			2006	2018
C01E-05-SF2	Whays Creek						
Shellfishing	Fecal Coliform	5B	0.098			2006	2018
C01E-06-SF2	Warehouse Creek						
Shellfishing	Fecal Coliform	5B	0.021			2006	2018
C01E-07-SF	Horn Harbor						
Shellfishing	Fecal Coliform	5B	0.069			2002	2014
C01E-08-BAC	Cockrell Creek						
Recreation	Enterococcus	5A	0.464			2008	2020
C01E-08-SF	Cockrell Creek						
Shellfishing	Fecal Coliform	5B	0.464			1998	2010
C01E-10-SF	Owens Pond						
Shellfishing	Fecal Coliform	5B	0.187			1998	2010
C01E-11-SF	Little Taskmakers Creek						
Shellfishing	Fecal Coliform	5B	0.040			2008	2020
C01E-12-SF2	Mill Creek						
Shellfishing	Fecal Coliform	5B	0.239			2004	2016
C01E-17-PCB	Chesapeake Bay and Tidal Tributaries						
Fish Consumption	PCB in Fish Tissue	5A	1,857.071			2006	2018
C01E-20-SF	Lees Cove						
Shellfishing	Fecal Coliform	5B	0.015			2002	2014
C01E-21-SF	Chesapeake Bay, UT						
Shellfishing	Fecal Coliform	5B	0.019			2002	2014
C01E-22-SF	Indian Creek						
Shellfishing	Fecal Coliform	5B	0.412			1998	2010
C01E-24-SF	Dymer Creek						
Shellfishing	Fecal Coliform	5B	0.177			1998	2010
C01E-25-SF	Georges Cove						
Shellfishing	Fecal Coliform	5B	0.034			1998	2010

Attachment 1-1

2008 Impaired Waters - 303(d) List

Category 5 - Waters needing Total Maximum Daily Load Study

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)	Initial List Date	TMDL Dev. Date
* **CB7PH-DO-BAY**	Chesapeake Bay segment CB7PH						
Aquatic Life	Oxygen, Dissolved	5A	553.618			1998	2010
	Oxygen, Dissolved	5A	33.248			2006	2010
Open-Water Aquatic Life	Oxygen, Dissolved	5A	553.618			1998	2010
	Oxygen, Dissolved	5A	33.248			2006	2010
* **CB7PH-SAV-BAY**	Chesapeake Bay segment CB7PH						
Aquatic Life	Aquatic Plants (Macrophytes)	5A	586.865			2006	2010
Shallow-Water Submerged Aquatic Vegetation	Aquatic Plants (Macrophytes)	5A	586.865			2006	2010
CB8PH-SAV-BAY	Chesapeake Bay segment CB8PH						
Aquatic Life	Aquatic Plants (Macrophytes)	5A	156.117			2006	2010
Shallow-Water Submerged Aquatic Vegetation	Aquatic Plants (Macrophytes)	5A	156.117			2006	2010
D01E-02-BAC	Little Mosquito Creek						
Recreation	Enterococcus	5A	0.208			2004	2016
D01E-02-DO	Little Mosquito Creek						
Aquatic Life	Oxygen, Dissolved	5A	0.138			2004	2016
	Oxygen, Dissolved	5A	0.071			2008	2020
D01E-02-SF	Little Mosquito Creek - Lower						
Shellfishing	Fecal Coliform	5B	0.138			1998	2010
D01E-03-BAC	Powells Bay						
Recreation	Enterococcus	5A	0.597			2006	2018
D01E-04-BAC	Swan Gut Creek						
Recreation	Enterococcus	5A	0.120			2006	2018
D01E-04-DO	Swan Gut Creek						
Aquatic Life	Oxygen, Dissolved	5A	0.120			2004	2016
D01E-04-SF	Swan Gut Creek						
Shellfishing	Fecal Coliform	5B	0.120			1998	2010
D01E-05-SF	Big Simoneaston Creek						
Shellfishing	Fecal Coliform	5B	0.018			2008	2020
D01E-13-SF	Greenbackville Harbor - DSS						
Shellfishing	Fecal Coliform	5B	0.009			1998	2010
D02E-01-BAC	Assawoman Creek						
Recreation	Enterococcus	5A	0.136			1998	2010
D02E-01-DO	Assawoman Creek						
Aquatic Life	Oxygen, Dissolved	5A	0.063			2004	2014
	Oxygen, Dissolved	5A	0.073			2008	2020
D02E-01-SF	Assawoman Creek						
Shellfishing	Fecal Coliform	5B	0.136			1998	2010

Attachment 1-2

*Appendix A - List of Impaired (Category 5) Waters in 2008**

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **C01E-17-PCB** **Chesapeake Bay and Tidal Tributaries**

Location: Chesapeake Bay mainstem and its small coastal tidal tributaries

City / County:					
	Accomack Co.	Chesapeake Bay - Co	Gloucester Co.	Lancaster Co.	Mathews Co.
	Middlesex Co.	Norfolk City	Northampton Co.	Northumberland Co.	Poquoson City City
	Virginia Beach City	York Co.			

Use(s): Fish Consumption

Cause(s) /
VA Category: PCB in Fish Tissue / 5A

The Chesapeake Bay and its tidal tributaries are included under the 12/13/2004 VDH Fish Consumption Advisories for PCBs. No more than 2 meals/month are recommended of anadromous (coastal) striped bass.

The advisory was based on the results of DEQ's fish tissue monitoring program, which showed elevated PCBs levels in several monitoring sites within the basin, including:

2 sp at 7-GWR007.97 in the Great Wicomico River
1 sp. At 7-COC000.40 in Cockrell Creek

Also, VDH issued an additional separate fish consumption advisory on 12/13/2004 for PCBs in the Mobjack Bay and its tributaries, particularly the East, West, and Ware Rivers. No more than two meals/month of gizzard shad are recommended.

Chesapeake Bay and Tidal Tributaries **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
PCB in Fish Tissue - Total Impaired Size by Water Type:	**1,857.071**		

Sources:

Source Unknown

Attachment 1-3

*Appendix A - List of Impaired (Category 5) Waters in 2008**

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **C11E-04-BAC** **North Branch, Onancock Creek**

Location: This cause encompasses the entirety of the North Branch, Onancock Creek. CBP segment CB7PH. DSS shellfish condemnation (PROHIBITION) # 081-013 F (effective 20061123).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) / VA Category: Enterococcus / 4A

The Recreation Use is impaired based on previous exceedance of the Fecal Coliform bacteria criteria (maximum of 8 violates / 12 obs, 2006 IR) and exceedance of the Enterococcus bacteria criteria (maximum of 3 violates / 3 obs),as well as exhibits Observed Effects due to unsufficient exceedance of Enterococcus bacteria criteria within a small data set (1 violates / 3 obs). Previous Use ID (2006 IR) as TMDL ID: VAT-C11E-04. Covered under TMDL ID VAT-C11E-04 (25414), North Branch, Onancock Creek, EPA approved 8/2/2006.

North Branch, Onancock Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Enterococcus - Total Impaired Size by Water Type:	**0.021**		

Sources:

Source Unknown

Attachment 1-4

*Appendix A - List of Impaired (Category 5) Waters in 2008**

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **CB7PH-DO-BAY** **Chesapeake Bay segment CB7PH**

Location: This cause encompasses the complete CBP segment CB7PH.

City / County: Accomack Co. Chesapeake Bay - Co Northampton Co.

Use(s): Aquatic Life Open-Water Aquatic Life

Cause(s) /
VA Category: Oxygen, Dissolved / 5A

The 30-day dissolved oxygen criteria for open water use failed for the 2008 assessment. The 30-day dissolved oxygen criteria for deep water use was met. There is insufficient data to assess remaining shorter dissolved oxygen criteria for these uses.

Chesapeake Bay segment CB7PH **Aquatic Life**		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Total Impaired Size by Water Type:	**586.865**		

Chesapeake Bay segment CB7PH **Open-Water Aquatic Life**		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Total Impaired Size by Water Type:	**586.865**		

Sources:

Agriculture	Atmospheric Deposition - Nitrogen	Clean Sediments	Industrial Point Source Discharge
Internal Nutrient Recycling	Loss of Riparian Habitat	Municipal Point Source Discharges	Sediment Resuspension (Clean Sediment)
Sources Outside State Jurisdiction or Borders	Wet Weather Discharges (Non-Point Source)	Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)	

Attachment 1-5

*Appendix A - List of Impaired (Category 5) Waters in 2008**

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **CB7PH-SAV-BAY** **Chesapeake Bay segment CB7PH**

Location: This cause encompasses the complete CBP segment CB7PH.

City / County: Accomack Co. Chesapeake Bay - Co Northampton Co.

Use(s): Aquatic Life Shallow-Water Submerged Aquatic Vegetation

Cause(s) / VA Category: Aquatic Plants (Macrophytes) / 5A

The acres of submerged aquatic vegetation (SAV) mapped through aerial surveys does not meet the criteria. There is insufficient data to assess the water clarity criteria.

Chesapeake Bay segment CB7PH **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type:	**586.865**		

Chesapeake Bay segment CB7PH **Shallow-Water Submerged Aquatic Vegetation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type:	**586.865**		

Sources:

Agriculture	Atmospheric Deposition - Nitrogen	Clean Sediments	Industrial Point Source Discharge
Internal Nutrient Recycling	Loss of Riparian Habitat	Municipal Point Source Discharges	Sediment Resuspension (Clean Sediment)
Sources Outside State Jurisdiction or Borders	Wet Weather Discharges (Non-Point Source)	Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)	

Attachment 1-4

VIRGINIA

305(b)/303(d)

WATER QUALITY INTEGRATED REPORT

to

CONGRESS and the EPA ADMINISTRATOR

for the

PERIOD

January 1, 2001 to December 31, 2006

Richmond, Virginia

October 2008

Attachment 1-7

TITLE 9. ENVIRONMENT

STATE WATER CONTROL BOARD

Final Regulation

REGISTRAR'S NOTICE: The State Water Control Board is claiming an exclusion from the Administrative Process Act in accordance with § 2.2-4006 A 4 a of the Code of Virginia, which excludes regulations that are necessary to conform to changes in Virginia statutory law where no agency discretion is involved. The State Water Control Board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Title of Regulation: **9VAC25-720. Water Quality Management Planning Regulation (amending 9VAC25-720-50, 9VAC25-720-110).**

Statutory Authority: § 62.1-44.15 of the Code of Virginia; 33 USC § 1313(e) of the Clean Water Act.

Effective Date: December 23, 2009.

Agency Contact: John M. Kennedy, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4312, FAX (804) 698-4032, or email john.kennedy@deq.virginia.gov.

Summary:

The amendments extend the deadline for securing a Certificate to Operate (CTO) for expanded design flow and associated nutrient waste load allocations for Harrisonburg-Rockingham Regional S.A.-North River STP, Fauquier Co. W&SA-Vint Hill STP, and Onancock STP from December 31, 2010, to December 31, 2011.

9VAC25-720-50. Potomac-Shenandoah River Basin.

A. Total Maximum Daily Load (TMDLs).

TMDL #	Stream Name	TMDL Title	City/County	WBID	Pollutant	WLA	Units
1.	Muddy Creek	Nitrate TMDL Development for Muddy Creek/Dry River, Virginia	Rockingham	B21R	Nitrate	49,389.00	LB/YR
2.	Blacks Run	TMDL Development for Blacks Run and Cooks Creek	Rockingham	B25R	Sediment	32,844.00	LB/YR
3.	Cooks Creek	TMDL Development for Blacks Run and Cooks Creek	Rockingham	B25R	Sediment	69,301.00	LB/YR
4.	Cooks Creek	TMDL Development for Blacks Run and Cooks Creek	Rockingham	B25R	Phosphorus	0	LB/YR
5.	Muddy Creek	TMDL Development for Muddy Creek and Holmans Creek, Virginia	Rockingham	B22R	Sediment	286,939.00	LB/YR
6.	Muddy Creek	TMDL Development for Muddy Creek and Holmans Creek, Virginia	Rockingham	B22R	Phosphorus	38.00	LB/YR
7.	Holmans Creek	TMDL Development for Muddy Creek and Holmans Creek, Virginia	Rockingham/ Shenandoah	B45R	Sediment	78,141.00	LB/YR
8.	Mill Creek	TMDL Development for Mill Creek and Pleasant Run	Rockingham	B29R	Sediment	276.00	LB/YR
9.	Mill Creek	TMDL Development for Mill Creek and Pleasant Run	Rockingham	B29R	Phosphorus	138.00	LB/YR
10.	Pleasant Run	TMDL Development for Mill Creek and Pleasant Run	Rockingham	B27R	Sediment	0.00	LB/YR
11.	Pleasant Run	TMDL Development for Mill Creek and Pleasant Run	Rockingham	B27R	Phosphorus	0.00	LB/YR
12.	Linville	Total Maximum Load Development for Linville	Rockingham	B46R	Sediment	5.50	TONS/YR

Attachment 2-1

decrease to TN = 36,547 lbs/yr; TP = 2,193 lbs/yr, based on a design flow capacity of 4.0 MGD.

(8) Fauquier Co. W&SA-Vint Hill STP: waste load allocations (WLAs) based on a design flow capacity of 0.95 million gallons per day (MGD). If plant is not certified to operate at 0.95 MGD design flow capacity by December 31, ~~2010~~ 2011, the WLAs will decrease to TN = 5,482 lbs/yr; TP = 548 lbs/yr, based on a design flow capacity of 0.6 MGD.

(9) Parkins Mill STP: waste load allocations (WLAs) based on a design flow capacity of 5.0 million gallons per day (MGD). If plant is not certified to operate at 5.0 MGD design flow capacity by December 31, 2010, the WLAs will decrease to TN = 36,547 lbs/yr; TP = 2,741 lbs/yr, based on a design flow capacity of 3.0 MGD.

9VAC25-720-110. Chesapeake Bay -- Small Coastal -- Eastern Shore River Basin.

A. Total maximum Daily Load (TMDLs).

TMDL #	Stream Name	TMDL Title	City/County	WBID	Pollutant	WLA	Units
1.	Parker Creek	Benthic Total Maximum Daily Load (TMDL) Development for Parker Creek , Virginia	Accomack	D03E	Total Phosphorus	664.2	Lbs/YR

B. Stream segment classifications, effluent limitations including water quality based effluent limitations, and waste load allocations.

Small Coastal and Chesapeake Bay-
TABLE B1—CURRENT STREAM SEGMENT CLASSIFICATION

Segment No.	Name	Current State Class
7-12A	Pocomoke Sound	EL
7-12B	Messongo Creek	EL
7-12C	Beasley Bay	EL
7-12D	Chesconessex Creek	EL
7-13	Onancock Creek	WQ
7-14	Pungoteague	WQ
7-12E	Nandua Creek	EL
7-15	Occohannock Creek	WQ
7-12F	Nassawadox Creek	EL
7-12G	Hungars Creek	EL
7-12H	Cherrystone Inlet	EL
7-12I	South Bay	EL
7-12J	Tangier Island	
7-11A	Chincoteague	EL
7-11B	Hog Bogue	EL
7-11C	Metomkim Bay	EL
7-11D	Machipongo River	EL
7-11E	South Ocean	EL

Small Coastal and Chesapeake Bay
TABLE B2 - EASTERN SHORE WASTELOAD ALLOCATIONS

		INTERIM WASTELOAD ALLOCATIONS[1]			FINAL WASTELOAD ALLOCATIONS		
		(Current Permit Limits)					
NAME	RECEIVING STREAM OR ESTUARY	BOD_5 (lb/d)	SUSPENDED SOLIDS (lb/d)	OIL & GREASE (lb/d)	BOD_5 (lb/d)	SUSPENDED SOLIDS (lb/d)	OIL & GREASE (lb/d)
Commonwealth of Va. Rest Area	Pitts Cr.	4.3	4.3	--	4.3	4.3	--
Edgewood Park	Bullbegger Cr.	0.80	0.80	--	0.80	0.80	--
Holly Farms	Sandy Bottom	167[3]	167[3]	10 mg/l	Stream survey/model and determination		

Attachment 2-2

Table B2 cont. BOD SS 096 BOD SS 096

	Cr.				of final wasteload allocations planned for the summer of 1980.		
Taylor Packing Company	Messongo Cr.	7006(3)	13010(3)	--	Stream survey/model was run previously. No change in permit anticipated.		
No. Accomack E.S.	Messongo Cr.	1.8	1.4	--	1.8	1.4	--
Messick & Wessels Nelsonia	Muddy Cr.	30mg/l (4)	30mg/l(4)	--	Interim wasteload allocations may be changed based on BAT guidance.		
Whispering Pines Motel	Deep Cr.	4.8	4.8	--	4.8	4.8	--
Town of Onancock	Onancock Cr.	21	21	--	21	21	--
Messick & Wessels	Onancock Cr.	30mg/l (4)	30mg/l(4)	--	Interim wasteload allocations may be changed based on guidance.		
So. Accomack E.S.	Pungoteague Cr.	1.8	1.4	--	1.8	1.4	--
A & P Exmore	Nassawadox Cr.	0.38	0.38	--	0.38	0.38	--
Norstrom Coin Laundry	Nassawadox Cr.	60mg/l (4) max.	60mg/l(4) max.	--	Interim wasteload allocation may be changed based on BAT guidance.		
NH-Acc. Memorial Hospital	Warehouse Cr.	12.5	12.5	--	21.5	12.5	--
Machipongo E.S. & H.H. Jr. High	Trib. To Oresbus Cr.	5.2	5.2	--	5.2	5.2	--
Town of Cape Charles	Cape Charles Harbor	62.6	62.6	--	62.6	62.6	--
America House	Chesapeake Bay	5	5	--	5	5	--
U.S. Coast Guard Chesapeake Bay	Chesapeake Bay	--	--	10/mgl(5)	--	--	10/mgl(5)
U.S. Government Cape Charles AFB	Magothy Bay	Currently No Discharge					
Exmore Foods (Process Water)	Trib. To Parting Cr.	200	100	--	Stream survey/model and determination of final wasteload allocations planned for the summer of 1980.		
Exmore Foods (Sanitary)	Trib. To Parting Cr.	30mg/l (5)	30mg/l(5)	--	30mg/l(5)	30mg/l(5)	--
Perdue Foods (process water)	Parker Cr.	May-Oct 275 367 Nov-Apr. 612 797	--	--	Interim Permit in process. Stream survey/models were run. No substantial change in permit anticipated.		
Perdue Foods (parking lot)	Parker Cr.	30mg/l (5)	30mg/l(5)	--	30mg/l(5)	30mg/l(5)	--
Accomack Nursing Home	Parker Cr.	2.7	2.6	--	2.7	2.6	--
U.S. Gov't NASA Wallops Island	Mosquito Cr.	75	75	--	75	75	--
U.S. Gov't NASA Wallops Island	Cat Cr.	1.25	1.25	--	1.25	1.25	--
F & G Laundromat	Chincoteague Channel	10	4.8	--	Interim wasteload allocations may be changed based on BAT guidance.		
U.S. Coast Guard	Chincoteatue Channel	--	--	15mg/l (max.)	--	--	15mg/l (max.)
Virginia- Carolina	Chincoteague	342	264	5.5	342	264	5.5

Attachment 2-3

[3]Data from Accomack-Northampton Co. Water Quality Management Plan.

[4]Estimated.

[5]May need a permit--either company has not responded to SWCB letter or operation has just started up.

[6]No limits -- has an NPDES permit, but is not required to monitor.

C. Nitrogen and phosphorus waste load allocations to restore the Chesapeake Bay and its tidal rivers. The following table presents nitrogen and phosphorus waste load allocations for the identified significant dischargers and the total nitrogen and total phosphorus waste load allocations for the listed facilities.

Virginia Waterbody ID	Discharger Name	VPDES Permit No.	Total Nitrogen (TN) Waste Load Allocation (lbs/yr)	Total Phosphorus (TP) Waste Load Allocation (lbs/yr)
C16E	Cape Charles Town WWTP (1)	VA0021288	6,091	457
C11E	Onancock WWTP (2)	VA0021253	9,137	685
C13E	Shore Memorial Hospital	VA0027537	1,218	91
C10E	Tangier WWTP	VA0067423	1,218	91
C10R	Tyson Foods – Temperanceville	VA0004049	22,842	1,142
	TOTALS:		40,506	2,467

NOTE: (1) Cape Charles STP: waste load allocations (WLAs) based on a design flow capacity of 0.5 million gallons per day (MGD). If plant is not certified to operate at 0.5 MGD design flow capacity by December 31, 2010, the WLAs will decrease to TN = 3,046 lbs/yr; TP = 228 lbs/yr, based on a design flow capacity of 0.25 MGD.

(2) Onancock STP: waste load allocations (WLAs) based on a design flow capacity of 0.75 million gallons per day (MGD). If plant is not certified to operate at 0.75 MGD design flow capacity by December 31, ~~2010~~ 2011, the WLAs will decrease to TN = 3,046 lbs/yr; TP = 228 lbs/yr, based on a design flow capacity of 0.25 MGD.

VA.R. Doc. No. R10-2198; Filed November 4, 2009, 11:23 a.m.

Attachment 2-K

5.3.1 Development of Wasteload Allocations

The Town of Onancock waste water treatment facility discharges to the N. Branch of Onancock Creek identified as shellfish condemnation area 13E and VAT-C11E-04 for recreation use impairment is a prohibited shellfish harvest area. The direct harvest of shellfish for human consumption is prohibited because of the location of a municipal wastewater treatment plant in this segment. The facility operates as a minor municipal discharger under VPDES Permit No. VA0021253 issued by the Virginia Department of Environmental Quality. The Fecal Coliform permit limit is 200 MPN/100 ml and the *enterococci* limit is 104 cfu/100ml. The facility is permitted to operate at flows of 250,000 gallons per day or less. The waste load for this facility is determined by multiplying the design flow by the permitted maximum bacteria concentration. This may be shown by the following formula:

Waste Load Allocation (WLA) = (permitted limit for bacteria) x (permitted maximum daily discharge volume)

For the permitted fecal coliform and *enterococci* limits this calculation is as follows:

(1) **WLA fecal coliform =** $\frac{\text{(200mpn) x (9.463529E+08)}}{\text{100 ml}}$

WLA fecal coliform = 1.9E+09 MPN fecal coliform/day

(2) **WLA *enterococci* =** $\frac{\text{(104) x (9.463529E+08)}}{\text{100 ml}}$

WLA *enterococci* = 9.8E+08 c.f.u. *enterococci*/day

5.4 Consideration of Critical Conditions and Seasonal Variation

EPA regulations at 40 CFR 130.7 (c)(1) require TMDLs to take into account critical conditions for stream flow, loading, and water quality parameters. The intent of this requirement is to ensure that the water quality of the waterbody is protected during times when they are most vulnerable.

Critical conditions are important because they describe the factors that combine to cause a violation of water quality standards and will help in identifying the actions that may have to be undertaken to meet water quality standards. The current loading to the waterbody was determined using a long-term record of water quality monitoring (observation) data. The period of record for the data was 1995 to 2002. The resulting estimate is quite robust.

Attachment 3-1

Chesapeake Bay:
Onancock Creek Watershed
Total Maximum Daily Load (TMDL)
Report for Shellfish Condemnation Areas
Listed Due to Bacteria Contamination

Virginia Department of Environmental Quality

December 2005

EPA approved 8/2/2006

Attachment 3-2

ATTACHMENT 9

TABLE III(a) AND TABLE III(b) - CHANGE SHEETS

TABLE III(a)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001	All - interim limits	Monitoring / Removed	Limited / Removed	All interim limits were removed from the permit, as the upgrade and expansion is complete with the reissuance of the permit and the old limits for the .25 plant are no longer applicable. The final limits for the .75 plant are now the only limits in the permit.	

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
Schedule of Compliance - enterococci, nitrogen and phosphorus	Schedule removed - limits in effect	
Special condition regarding future coverage under the Nutrient General Permit	Special condition removed - coverage under the GP has been issued	

TABLE III(b)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001					

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 10

EPA PERMIT CHECKLIST

Revised 2/2003

State "Transmittal Checklist" to Assist in Targeting Municipal and Industrial Individual NPDES Draft Permits for Review

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: Onancock WWTP

NPDES Permit Number: VA0021253

Permit Writer Name: Mark Sauer

Date: 12/1/10

Major [ ] **Minor** [X] **Industrial** [ ] **Municipal** [X]

I.A. Draft Permit Package Submittal Includes:	**Yes**	**No**	**N/A**
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?		X	
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?	X		
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?		X	
8. Whole Effluent Toxicity Test summary and analysis?		X	
9. Permit Rating Sheet for new or modified industrial facilities?			X

I.B. Permit/Facility Characteristics	**Yes**	**No**	**N/A**
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet **or** permit contain a description of the wastewater treatment process?	X		

I.B. Permit/Facility Characteristics – cont.	Yes	No	N/A
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet **or** permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?	X		
a. Has a TMDL been developed and approved by EPA for the impaired water?	X		
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?	X		
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?	X		
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?		X	
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?	X		
12. Are there any production-based, technology-based effluent limits in the permit?		X	
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?			X
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Checklist – for POTWs

(To be completed and included in the record only for POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (POTWs)	Yes	No	N/A
1. Does the permit contain numeric limits for ALL of the following: BOD (or alternative, e.g., CBOD, COD, TOC), TSS, and pH?	X		
2. Does the permit require at least 85% removal for BOD (or BOD alternative) and TSS (or 65% for equivalent to secondary) consistent with 40 CFR Part 133?	X		
a. If no, does the record indicate that application of WQBELs, or some other means, results in more stringent requirements than 85% removal or that an exception consistent with 40 CFR 133.103 has been approved?			X
3. Are technology-based permit limits expressed in the appropriate units of measure (e.g., concentration, mass, SU)?	X		
4. Are permit limits for BOD and TSS expressed in terms of both long term (e.g., average monthly) and short term (e.g., average weekly) limits?	X		
5. Are any concentration limitations in the permit less stringent than the secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day average and 45 mg/l BOD5 and TSS for a 7-day average)?		X	
a. If yes, does the record provide a justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations?			X

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the fact sheet indicate that any WQBELs were derived from a completed and EPA approved TMDL?		X	
II.D. Water Quality-Based Effluent Limits – cont.	**Yes**	**No**	**N/A**
3. Does the fact sheet provide effluent characteristics for each outfall?	X		

4. Does the fact sheet document that a "reasonable potential" evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?	X		
d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations)?			X
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term AND short-term effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the record indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters and other monitoring as required by State and Federal regulations?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require at least annual influent monitoring for BOD (or BOD alternative) and TSS to assess compliance with applicable percent removal requirements?		X	
4. Does the permit require testing for Whole Effluent Toxicity?		X	

II.F. Special Conditions	Yes	No	N/A
1. Does the permit include appropriate biosolids use/disposal requirements?	X		
2. Does the permit include appropriate storm water program requirements?			X

II.F. Special Conditions – cont.	Yes	No	N/A
3. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
4. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?	X		

5. Does the permit allow/authorize discharge of sanitary sewage from points other than the POTW outfall(s) or CSO outfalls [i.e., Sanitary Sewer Overflows (SSOs) or treatment plant bypasses]?		X	
6. Does the permit authorize discharges from Combined Sewer Overflows (CSOs)?		X	
a. Does the permit require implementation of the "Nine Minimum Controls"?			X
b. Does the permit require development and implementation of a "Long Term Control Plan"?			X
c. Does the permit require monitoring and reporting for CSO events?			X
7. Does the permit include appropriate Pretreatment Program requirements?	X		

II.G. Standard Conditions	Yes	No	N/A
1. Does the **permit** contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		

List of Standard Conditions – 40 CFR 122.41

Duty to comply
Duty to reapply
Need to halt or reduce activity not a defense
Duty to mitigate
Proper O & M
Permit actions
Property rights
Duty to provide information
Inspections and entry
Monitoring and records
Signatory requirement
Bypass
Upset
Reporting Requirements
Planned change
Anticipated noncompliance
Transfers
Monitoring reports
Compliance schedules
24-Hour reporting
Other non-compliance

2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for POTWs regarding notification of new introduction of pollutants and new industrial users [40 CFR 122.42(b)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	Mark Sauer
Title	Permit Engineer
Signature	
Date	12/1/10

ATTACHMENT 11

CHRONOLOGY SHEET

VPDES PERMIT PROGRAM

CHRONOLOGY OF EVENTS

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED

APPLICATION TO VDH:	VDH COMMENTS RECEIVED:
APPLICATION TO OWPS:	OWPS COMMENTS RECEIVED:
APPLICATION ADMIN. COMPLETE:	APPLICATION TECH. COMPLETE:
DATE FORWARDED TO ADMIN:	

Date	DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos, hearings, etc. affecting permit from application to issuance)